

OUTDOOR

WATER DETECTION



SMART INDUSTRY

SMART BUILDING

THIS SENLAB™ D, FEATURING THE LoRaWAN™ CONNECTIVITY PROTOCOL, IS EQUIPPED WITH A WATER CABLE DETECTION OF 5 M.

Ref : LEA-LAB-13NS



+ 20 years*

15km* IP68 (Outdoor use)

Local or Public Network compliant

*Depending on the operating conditions

It offers a solution to detect water presence on the floor and can alert with an alarm as soon as water presence is detected.

This Senlab offers best in class features such as :

- **Battery Life time more than 20 years**
- **Rich data content**
- **Radio performances**
- **Advanced set of functionalities**

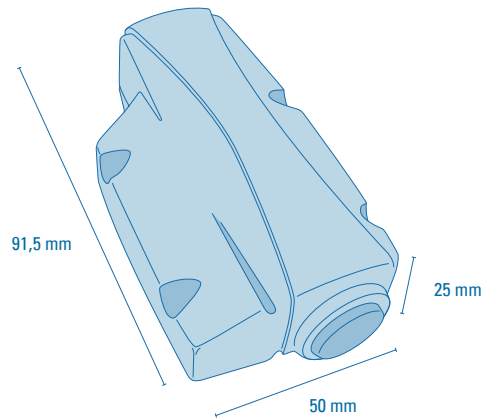
TYPICAL APPLICATIONS

- Protect water-sensitive material (data center, critical equipment...)
- Any system for which water presence is critical

TYPICAL SPECIFICATIONS

Physical specifications	Dimensions	56 x 102 x 35 mm
	Weight	190 gr
	Operating temperature	-20°C to +70°C
RF specifications	RF sensitivity	-137dBm
	RF power	+14dBm (25mW)
	Radio band	868 MHz
EC Conformity : Compliant with Directive 2014/53/UE (RED)	EMC	Final draft EN 301 489-3 v2.1.1 Draft EN 301 489-1 v2.2.0
	Radio	EN 300 220-2 v3.1.1
	Magnetic field exposure	EN 62479
	Safety	EN 60950-1, EN 60950-22

DIMENSIONAL DRAWING



TECHNICAL FEATURES FOCUS

Plug & Play installation

- Water detection cable length : 5 meters (up to 25m on demand)
- Cable fixation on soil with non metallic ties (not provided)
- Activation with magnet (LED feedback)

High configurability of event detection and transmission

- Event notification of water detection and/or end of detection
- Immediate transmission or after stable state duration
- Reconfiguration possible over the air

Network configuration

- LoRaWAN parameters (OTAA or ABP activation mode, initial datarate,...)
- Encryption keys customizable by client
- Standard LoRaWAN retries support
- Radio collisions avoidance by pseudo-randomization of transmissions
- Advanced transmission reliability mechanisms (recovery of lost messages, ...)

BATTERY LIFE DURATION ESTIMATION

This following matrix provides the estimated battery lifetime depending on the average spreading factor used by the Senlab and the transmission period.

Battery life (years)	10 min	15 min	30 min	1 h	2 h	4 h	6 h	8 h	12 h	24 h
SF7	16,4	18,2	>20	>20	>20	>20	>20	>20	>20	>20
SF8	13,6	15,8	18,8	>20	>20	>20	>20	>20	>20	>20
SF9	10,1	12,4	16,2	19,0	>20	>20	>20	>20	>20	>20
SF10	6,8	8,8	12,8	16,5	19,3	>20	>20	>20	>20	>20
SF11	4,2	5,8	9,3	13,2	16,8	19,5	>20	>20	>20	>20
SF12	2,5	3,5	6,1	9,7	13,6	17,2	18,8	19,7	>20	>20

A single event per frame.

For guidance and information purposes only.